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# NOTICE OF ALLOWANCE AND FEE(S) DUE

30593 7590 12/29/2008 HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 8910 RESTON, VA 20195 EXAMINER

SIM, YONG H

ART UNIT PAPER NUMBER

2639

DATE MAILED: 12/29/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/773,227	02/09/2004	Tomoo Furukawa	12480-000034/US	3166

TITLE OF INVENTION: EVALUATION APPARATUS OF LIQUID CRYSTAL DISPLAY DEVICE, LIQUID CRYSTAL DISPLAY DEVICE, AND EVALUATION METHOD OF LIQUID CRYSTAL DISPLAY DEVICE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	03/30/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT, PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

appropriate. All further indicated unless correcte maintenance fee notifical	ed below or directed oth	ng the Patent, advance on nerwise in Block 1, by (	rders and notification a) specifying a new co	of m	aintenance fees v ondence address;	ill be and/or	mailed to the current (b) indicating a sepa	corre	espondence address as "FEE ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.					
HARNESS, DI P.O. BOX 8910 RESTON, VA 2	7590 12/29 CKEY & PIERCI 0195			I here State: addre transi	eby certify that the s Postal Service vessed to the Mail	is Fec(: /ith suf	of Mailing or Trans s) Transmittal is being ficient postage for fir ISSUE FEE address 1) 273-2885, on the d	g depe st clas abov	osited with the United ss mail in an envelope c. or being facsimile
									(Depositor's name)
									(Signature)
								_	(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVEN	TOR		ATTO	RNEY DOCKET NO.	CC	ONFIRMATION NO.
10/773,227 TITLE OF INVENTION EVALUATION METHO			Tomoo Furukawa CRYSTAL DISPLAY		VICE, LIQUID C		480-000034/US AL DISPLAY DEVI	CE, A	3166 AND
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE D	UE	PREV. PAID ISSU	FEE	TOTAL FEE(8) DUE	П	DATE DUE
nonprovisional	NO	\$1510	\$300		\$0		\$1810		03/30/2009
EXAM	INER	ART UNIT	CLASS-SUBCLASS						
SIM, YONG H 2629 324-770000									
"Fee Address" ind. PTO/SB/47; Rev 03-0 Number is required.  3. ASSIGNEE NAME A	ondence address (or Cha 3/122) attached. ication (or "Fee Address 2 or more recent) attach	nge of Correspondence  "Indication form ed. Use of a Customer		p to inative ingle or ag attor I be p	3 registered pater ely, firm (having as a gent) and the nam neys or agents. If orinted.	memb es of u no nam	er a 2 o to e is 3		nent has been filed for
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Advance Order -	o small entity discount p	permitted)	b. Payment of Fee(s): (  A check is enclosed Payment by credit  The Director is he overpayment, to D	ed. t card reby	I. Form PTO-2038 authorized to cha	is atta	ched. required fee(s), any de	ficier	
	s SMALL ENTITY state	is. See 37 CFR 1.27.	b. Applicant is no						
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (it requeecords of the United Sta	uired) will not be accepte tes Patent and Trademark	d from anyone other the Office.	an th	e applicant; a regi	stered a	ittorney or agent; or ti	ne ass	ignee or other party in
Authorized Signature					Date				
Typed or printed name			Registration No.						
This collection of inform an application. Confident submitting the complete this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C itality is governed by 35 I application form to the ons for reducing this but irginia 22313-1450. DC 13-1450.	FR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the ONOT SEND FEES OR	on is required to obtain 1.14. This collection is depending upon the i e Chief Information O COMPLETED FORM	or re s esti- ndivi fficer S TO	tain a benefit by t mated to take 12 dual case. Any co ; U.S. Patent and THIS ADDRESS	he publ minutes mment Traden i. SENI	ic which is to file (and to complete, including s on the amount of ti- nark Office, U.S. Dep O TO: Commissioner	I by to ng gat me yo artme for P.	the USPTO to process) thering, preparing, and ou require to complete ent of Commerce, P.O. atents, P.O. Box 1450,

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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



# UNITED STATES PATENT AND TRADEMARK OFFICE

#### UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

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10/773,227	02/09/2004	Tomoo Furukawa	12480-000034/US	3166	
30593 75	90 12/29/2008	EXAMINER			
HARNESS, DIC	KEY & PIERCE, P.I	SIM, YONG H			
P.O. BOX 8910		ART UNIT	PAPER NUMBER		
RESTON, VA 201	95		2629		

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

 $(application \ filed \ on \ or \ after \ May \ 29, \ 2000)$ 

The Patent Term Adjustment to date is 714 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 714 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

# Application No. Applicant(s) 10/773,227 FURUKAWA ET AL. Notice of Allowability Examiner Art Unit 2629 YONG SIM -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to 11/24/2008. The allowed claim(s) is/are 43,44,46,56,61-65 and 67. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). b) ☐ Some\* c) ☐ None of the: a) 🔯 All 1. A Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). \* Certified copies not received: \_\_\_\_\_. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. Examiner's Amendment/Comment Paper No./Mail Date 4. T Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance of Biological Material 9. ☐ Other .

Application/Control Number: 10/773,227

Art Unit: 2629

### Allowable Subject Matter

Claims 43 – 44, 46, 56, 61 – 65 and 67 are allowed.

2. The following is an examiner's statement of reasons for allowance:

Miyata et al. (US 2002/0033789 A1) teaches a liquid crystal display device carrying out tone display with pixels by applying a tone voltage according to tone data to each pixel in each frame, and includes: an LUT memory, which receives tone data of a display frame and tone data of an immediately preceding frame, for converting and outputting the tone data of the display frame.

Usui et al. (US 5,347,294) teaches an image display circuit comprising a table ROM with data of generated gray scale data greater (overshoot) than the gray scale of the current video signal (Usui: Col. 1, lines 45 – 60) and a plurality of ROM Tables provided in association with different temperature (Usui: Col. 6, lines 15 - 18.).

Shimada et al. (US 5,801,673) teaches a liquid crystal display device wherein an overshoot and an undershoot are added by the data signal generating circuit to portions of a waveform of a data signal (Shimada: Col. 13, lines 50 - 56.).

However, none of the prior art of record teaches the newly added limitation "wherein the optimum one of the display results is a display result of the display results where the attainment tone is substantially displayed faster than a

remainder of the display results without exceeding the attainment tone." In other words, none of the prior art of record teaches the specific steps of obtaining a plurality of tested attainment tone without any calculation to select an optimum attainment tone which is faster than the rest or remaining tested attainment tone results.

Therefore, the claims indicated to be allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YONG SIM whose telephone number is (571)270-1189. The examiner can normally be reached on Monday - Friday (Alternate Fridays off) 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571) 272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2629

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/YONG SIM/ Examiner, Art Unit 2629

/Amr Awad/ Supervisory Patent Examiner, Art Unit 2629

12/15/2008